

What is claimed is:

1 1. A broadcast program transmission/reception system
2 that inserts one or more commercials into a pay broadcast
3 program and transmits the pay broadcast program with one
4 or more commercials to one of a plurality of viewer's
5 terminals, the broadcast program transmission/reception
6 system comprising:

7 a pay broadcast program site for providing pay
8 broadcast programs;

9 a plurality of commercial information management
10 sites, each of which presents a list of the pay broadcast
11 programs to a viewer's terminal as requested by the
12 viewer's terminal, receives a pay broadcast program
13 designated by the viewer's terminal from the pay broadcast
14 program site, and transmits the pay broadcast program with
15 one or more commercials to the viewer's terminal; and

16 the plurality of viewer's terminals, each of which
17 requests the list of the pay broadcast programs from any
18 one of the plurality of commercial information management
19 sites, requests a pay broadcast program included in the
20 list of the pay broadcast programs from the commercial
21 information management site, and receives and reproduces
22 the pay broadcast program with one or more commercials.

1 2. The broadcast program transmission/reception system
2 of Claim 1, wherein

3 each of the plurality of commercial information

4 management sites includes:

5 a pay broadcast program list storage unit for storing
6 a pay broadcast program list on which pay broadcast program
7 identifiers are listed;

8 a commercial storage unit for storing a plurality of
9 commercials;

10 a pay broadcast program list transmission unit for,
11 when receiving a transmission request for the pay broadcast
12 program list from a viewer's terminal, reading the list
13 from the pay broadcast program list storage unit, and
14 transmitting the list to the viewer's terminal;

15 a transmission request reception unit for receiving
16 a transmission request for a pay broadcast program from
17 a viewer's terminal, the transmission request including
18 a pay broadcast program identifier included in the pay
19 broadcast program list and corresponding to the requested
20 pay broadcast program;

21 a pay broadcast program transmission requesting unit
22 for issuing a transmission request for the pay broadcast
23 program in accordance with the transmission request issued
24 by the viewer's terminal to the pay broadcast program site;

25 a reception unit for receiving the pay broadcast
26 program from the pay broadcast program site;

27 an edit unit for reading one or more commercials from
28 the commercial storage unit and edit the pay broadcast
29 program by inserting the commercials therein to produce
30 a pay broadcast program with commercials;

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31 a transmission unit for transmitting the pay
32 broadcast program with commercials to the viewer's
33 terminal that has requested the pay broadcast program; and
34 a transmission counting unit for accumulating the
35 number of pay broadcast programs/commercials that have
36 been transmitted to the viewer's terminals for each pay
37 broadcast program/commercial.

1 3. The broadcast program transmission/reception system
2 of Claim 2, wherein
3 each of the commercial information management sites
4 further includes:

5 a commercial list storage unit for storing a
6 commercial list on which identifiers of available
7 commercials stored in the commercial storage unit are
8 listed,

9 wherein the pay broadcast program list transmission
10 unit reads the commercial list from the commercial list
11 storage unit as well as the pay broadcast program list,
12 and transmits both of the lists to the viewer' terminal
13 that has requested the program list,

14 the transmission request reception unit receives
15 identifiers of commercials selected from the commercial
16 list by the viewer's terminal, as well as the pay broadcast
17 program identifier, and

18 the edit unit reads commercials corresponding to the
19 identifiers of the selected commercials from the

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20 commercial storage unit to edit a pay broadcast program
21 with commercials,

22 each of the viewer's terminals includes:

23 a pay broadcast program list requesting unit for
24 requesting a pay broadcast program list from a commercial
25 information management site;

26 a list reception unit for receiving the pay broadcast
27 program list and a commercial list from the commercial
28 information management site;

29 a display control unit for displaying, on a monitor,
30 a broadcast program selection screen on which a plurality
31 of titles of pay broadcast programs are listed according
32 to the content of the program list, and after a viewer
33 selects a pay broadcast program title, displaying, on the
34 monitor, a commercial selection screen on which a plurality
35 of identifiers of commercials are listed according to the
36 content of the commercial list;

37 a transmission request transmission unit for
38 transmitting a transmission request for the pay broadcast
39 program, the transmission request including the title of
40 the selected pay broadcast program and the identifiers of
41 the selected commercials;

42 a reception unit for receiving the pay broadcast
43 program with commercials; and

44 a reproduction unit for reproducing the pay broadcast
45 program with commercials received by the reception unit.

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1 4. The broadcast program transmission/reception system
2 of Claim 3, wherein

3 the commercial list storage unit in the commercial
4 information management site further stores predetermined
5 points set for each commercial identifier, the points for
6 a commercial identifier are given to the viewer's terminal
7 that selects a commercial corresponding to the commercial
8 identifier, and

9 the display control unit in the viewer's terminal
10 displays predetermined points corresponding to each
11 commercial identifier displayed on the commercial
12 selection screen, wherein

13 each of the viewer's terminals further includes:

14 a commercial selection reception unit for receiving
15 a selection of a commercial identifier among the plurality
16 of commercial identifiers displayed on the monitor; and

17 a transmission request permission unit for, every
18 time a commercial identifier is selected, accumulating
19 total points by adding corresponding predetermined points
20 to a current total points, and when the total points becomes
21 predetermined value or more, permitting a transmission
22 request of the pay broadcast program to be issued.

1 5. The broadcast program transmission/reception system
2 of Claim 4, wherein

3 the commercial information management site further
4 includes:

5 an advertisement fee calculation unit for
6 calculating an advertisement fee for a commercial based
7 on a base fee set for one point, predetermined points
8 corresponding to the commercial, the number of times the
9 commercial has been transmitted.

1 6. The broadcast program transmission/reception system
2 of Claim 3, wherein

3 each of the viewer's terminals further includes:
4 a commercial selection reception unit for receiving
5 a selection of a commercial identifier among the plurality
6 of commercial identifiers displayed on the monitor; and

7 a transmission request permission unit for, when a
8 predetermined number of the commercial identifiers has
9 been selected, permitting a transmission request of the
10 pay broadcast program to be issued.

1 7. The broadcast program transmission/reception system
2 of Claim 3, wherein

3 the commercial list storage unit in the commercial
4 information management site further stores added
5 information for each commercial identifier, the added
6 information indicating the content of a commercial
7 corresponding to the commercial identifier, and

8 the display control unit in the viewer's terminal
9 displays the added information corresponding to each
10 commercial identifier on the commercial selection screen.

1 8. The broadcast program transmission/reception system
2 of Claim 3, wherein

3 each of the commercial information management site
4 further includes:

5 a commercial selection rate calculation unit for
6 calculating a selection rate of each commercial selected
7 among all of the commercials, based on the identifiers of
8 the selected commercials received by the transmission
9 request reception unit, the commercial selection rate
10 being provided for a commercial sponsor that provides the
11 commercial.

1 9. The broadcast program transmission/reception system
2 of Claim 2, wherein

3 the pay broadcast program list transmission unit in
4 each of the commercial information management sites
5 includes:

6 a request distribution unit for, when the number of
7 transmission requests for the pay broadcast program list
8 received from each of the viewer's terminals becomes a
9 predetermined number or more, transmitting identifying
10 information on another commercial information management
11 site instead of the pay broadcast program list to the
12 viewer's terminal that has requested the pay broadcast
13 program list, wherein

14 the viewer's terminal that receives the identifying
15 information on the other commercial information management

16 site issues a transmission request for the pay broadcast
17 program list to the commercial information management site
18 identified with the received identifying information.

1 10. The broadcast program transmission/reception system
2 of Claim 2, wherein

3 each of the commercial information management site
4 further includes:

5 a usage charge/advertisement fee calculation unit
6 for calculating a usage charge for a pay broadcast program
7 based on a usage charge for one transmission of a pay
8 broadcast program and the number of transmission of the
9 pay broadcast program and calculating an advertisement fee
10 for a commercial based on an advertisement fee for one
11 transmission of a commercial and the number of transmission
12 of the commercial.

1 11. The broadcast program transmission/reception system
2 of Claim 2, wherein

3 the edit unit in each of the commercial information
4 management site includes:

5 a header information generation unit for generating
6 identifying information on the pay broadcast program and
7 identifying information on each commercial inserted into
8 the pay broadcast program and the number of commercials
9 inserted into the pay broadcast program as header
10 information on the pay broadcast program with commercials,

11 the transmission counting unit in each of the
12 commercial information management site includes:
13 a header information reading unit for reading the
14 header information on the pay broadcast program with
15 commercials transmitted by the transmission unit; and
16 an accumulation unit for accumulating the number of
17 pay broadcast programs and the commercials for each piece
18 of header information.

1 12. The broadcast program transmission/reception system
2 of Claim 1, wherein

3 the pay broadcast program site includes:
4 an authentication licensing information storage unit
5 for storing authentication licensing information
6 consisting of a plurality of pieces of authentication
7 information, each piece of authentication information is
8 used for judging whether or not to transmit a pay broadcast
9 program to a commercial information management site;

10 an authentication information reception unit for
11 receiving a piece of authentication information from the
12 commercial information management site; and

13 a judgement unit for judging whether the received
14 authentication information complies with any one piece of
15 authentication information stored in the authentication
16 licensing information storage unit, and when the received
17 authentication information complies with one piece of
18 authentication information, permitting the pay broadcast

19 program to be provided for the commercial information
20 management unit, but when the received authentication
21 information does not comply with any pieces of
22 authentication information, refusing the pay broadcast
23 program to be provided for the commercial information
24 management site,
25 each of the commercial information management sites
26 includes:
27 a authentication information transmission unit for
28 transmitting a piece of authentication information
29 including a title of a pay broadcast program to the pay
30 broadcast program site;
31 a reception unit for receiving an authentication
32 licensing notification and a pay broadcast program from
33 the pay broadcast program site, or receiving an
34 authentication refusal notification from the pay broadcast
35 program site;
36 a pay broadcast program storage unit for storing the
37 pay broadcast program received by the reception unit;
38 an edit unit for editing the pay broadcast program
39 by inserting commercials therein to generate a pay
40 broadcast program with commercials; and
41 a pay broadcast program with commercials
42 transmission unit for transmitting the pay broadcast
43 program with commercials to the viewer's terminal that has
44 requested the pay broadcast program.

1 13. The broadcast program transmission/reception system
2 of Claim 12, wherein

3 each of the commercial information management sites
4 further includes:

5 a deletion unit for deleting the pay broadcast
6 program and the pay broadcast program with commercials
7 stored in the pay broadcast program storage unit,
8 immediately after the pay broadcast program with
9 commercials transmission unit transmits the pay broadcast
10 program with commercials to the viewer's terminal.

1 14. The broadcast program transmission/reception system
2 of Claim 12, wherein

3 each piece of authentication information stored in
4 the authentication licensing information storage unit
5 includes a delivery form, and

6 the judgement unit judges whether the received
7 authentication information complies with any one piece of
8 authentication information stored in the authentication
9 licensing information storage unit based on the delivery
10 form.

1 15. The broadcast program transmission/reception system
2 of Claim 12, wherein

3 each piece of authentication information includes a
4 delivery form, the delivery form is defined by a type of
5 each viewer's terminal, and

6 the pay broadcast program with commercials
7 transmission unit transmits the pay broadcast program with
8 commercials to the viewer's terminal that has requested
9 the pay broadcast program according to the delivery form
10 specified for the viewer's terminal.

1 16. The broadcast program transmission/reception system
2 of Claim 12, wherein

3 each piece of authentication information stored in
4 the authentication licensing information storage unit
5 includes destination information, the destination
6 information including information on a area including a
7 destination of the pay broadcast program and/or
8 information on a viewer, and

9 the judgement unit judges whether the received
10 authentication information complies with any one piece of
11 authentication information stored in the authentication
12 licensing information storage unit based on the
13 destination information.

1 17. The broadcast program transmission/reception system
2 of Claim 12, wherein

3 each piece of authentication information stored in
4 the authentication licensing information storage unit
5 includes one of an identifier and a category of each
6 commercial to be inserted into the pay broadcast program,
7 and the judgement unit judges whether the received

8 authentication information complies with any one piece of
9 authentication information stored in the authentication
10 licensing information storage unit based on one of the
11 identifier and the category.

1 18. A method for transmitting/receiving a broadcast
2 program by which commercials are inserted into a pay
3 broadcast program to produce a pay broadcast program with
4 commercials and the pay broadcast program with commercials
5 is transmitted to one of a plurality of viewer's terminal,
6 the method comprising the steps of:

7 receiving a transmission request for a pay broadcast
8 program list from the viewer's terminal, the list includes
9 titles of pay broadcast programs thereon;

10 transmitting the pay broadcast program list to the
11 viewer's terminal;

12 receiving a request for a pay broadcast program whose
13 title is listed on the pay broadcast program list from the
14 viewer's terminal;

15 transmitting a request for the requested pay
16 broadcast program to a pay broadcast program site;

17 receiving the pay broadcast program from the pay
18 broadcast program site;

19 inserting one or more stored commercials into the
20 received pay broadcast program to produce a pay broadcast
21 program with commercials; and

22 transmitting the pay broadcast program with

23 commercials to the viewer's terminal.

1 19. The broadcast program transmission/reception method
2 of Claim 18, wherein

3 the transmitting step of the pay broadcast program
4 list includes transmitting a commercial list on which
5 identifiers of commercials to be inserted into the pay
6 broadcast program and points corresponding to each
7 commercial identifier are listed, together with the pay
8 broadcast program list, the points being given to the
9 viewer's terminal when the viewer's terminal selecting a
10 commercial,

11 the receiving step of the request for the pay
12 broadcast program includes receiving identifiers of
13 selected commercials together with the request for the pay
14 broadcast program request,

15 the inserting step of commercials inserts
16 commercials identified with the selected commercial
17 identifiers into the pay broadcast program, wherein

18 the method comprises the further steps of:

19 accumulating the number of transmitted commercials
20 for each commercial;

21 calculating an advertisement fee for a commercial
22 based on a base fee set for one point, predetermined points
23 corresponding to the commercial, the number of times the
24 commercial has been transmitted.

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1 20. The broadcast program transmission/reception method
2 of Claim 18, wherein

3 the transmitting step of the pay broadcast program
4 list includes transmitting a commercial list on which
5 identifiers of commercials to be inserted into the pay
6 broadcast program are listed, together with the pay
7 broadcast program list,

8 the receiving step of the request for the pay
9 broadcast program includes receiving identifiers of
10 selected commercials together with the request for the pay
11 broadcast program request,

12 the inserting step of commercials inserts
13 commercials identified with selected commercial
14 identifiers into the pay broadcast program, wherein

15 the method comprises the further steps of:
16 accumulating the number of transmitted commercials
17 for each commercial; and

18 calculating a commercial selection rate for each
19 commercial selected among all of the commercials, based
20 on the identifiers of the selected commercials received
21 in the receiving step of the request for the pay broadcast
22 program, the commercial selection rate being provided for
23 a commercial sponsor that provides the commercial.

1 21. The broadcast program transmission/reception method
2 of Claim 18, wherein

3 the transmitting step of the request for the pay

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4 broadcast program includes transmitting authentication
5 information containing the request for the pay broadcast
6 program, the authentication information including a
7 delivery form defined by a type of the viewer's terminal,
8 the receiving step of the pay broadcast program
9 includes receiving an authentication licensing
10 notification together with the pay broadcast program when
11 the pay broadcast program site gives a license, and
12 the transmitting step of the pay broadcast program
13 with commercials transmits the pay broadcast program with
14 commercials to the viewer's terminal according to the
15 delivery form specified for the viewer's terminal.

1 22. A computer program that makes a computer execute a
2 method for transmitting/receiving broadcast programs by
3 which a pay broadcast program with commercials is
4 transmitted to one of a plurality of viewer's terminals,
5 the computer program has the computer conduct the steps
6 of:

7 receiving a transmission request for a pay broadcast
8 program list from the viewer's terminal, the list includes
9 titles of pay broadcast programs thereon;

10 transmitting the pay broadcast program list to the
11 viewer's terminal;

12 receiving a request for a pay broadcast program whose
13 title is listed on the pay broadcast program list from the
14 viewer's terminal;

15 transmitting a request for the requested pay
16 broadcast program to a pay broadcast program site;
17 receiving the pay broadcast program from the pay
18 broadcast program site;
19 inserting one or more stored commercials into the
20 received pay broadcast program to produce a pay broadcast
21 program with commercials; and
22 transmitting the pay broadcast program with commercials
23 to the viewer's terminal.

1 23. A recording medium that is readable for a computer,
2 the recording medium recording a computer program that
3 makes the computer execute a method for
4 transmitting/receiving broadcast programs by which a pay
5 broadcast program with commercials is transmitted to one
6 of a plurality of viewer's terminals, the computer program
7 embodied on the recording medium has the computer conduct
8 the steps of:

9 receiving a transmission request for a pay broadcast
10 program list from the viewer's terminal, the list includes
11 titles of pay broadcast programs thereon;

12 transmitting the pay broadcast program list to the
13 viewer's terminal;

14 receiving a request for a pay broadcast program whose
15 title is listed on the pay broadcast program list from the
16 viewer's terminal;

17 transmitting a request for the requested pay

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18 broadcast program to a pay broadcast program site;
19 receiving the pay broadcast program from the pay
20 broadcast program site;
21 inserting one or more stored commercials into the
22 received pay broadcast program to produce a pay broadcast
23 program with commercials; and
24 transmitting the pay broadcast program with
25 commercials to the viewer's terminal.

1 24. A pay broadcast program site that is connected to a
2 plurality of commercial information management sites via
3 a network, each of the plurality of commercial information
4 management sites inserting commercials into a pay
5 broadcast program to produce a pay broadcast program and
6 transmitting the pay broadcast program with commercials
7 to one of a plurality of viewer's terminals, the pay
8 broadcast program site comprising:

9 an authentication licensing information storage unit
10 for storing authentication licensing information
11 consisting of a plurality of pieces of authentication
12 information, each piece of authentication information is
13 used for judging whether or not to transmit a pay broadcast
14 program to a commercial information management site and
15 includes a delivery form that is defined by a type of a
16 viewer's terminal;

17 an authentication information reception unit for
18 receiving a piece of authentication information from the

19 commercial information management site;
20 a judgement unit for judging whether the received
21 authentication information complies with any one piece of
22 authentication information stored in the authentication
23 licensing information storage unit, and when the received
24 authentication information complies with one piece of
25 authentication information, permitting the pay broadcast
26 program to be provided for the commercial information
27 management unit, but when the received authentication
28 information does not comply with any pieces of
29 authentication information, refusing the pay broadcast
30 program to be provided for the commercial information
31 management site, the delivery form being utilized for the
32 judgement;
33 a pay broadcast program storage unit for storing pay
34 broadcast programs;
35 a pay broadcast program transmission unit for, when
36 the judgement means permits the transmission, reading the
37 requested broadcast program from the pay broadcast program
38 storage unit, and transmitting the pay broadcast program
39 together with an authentication licensing notification to
40 the commercial information management site that has
41 requested the pay broadcast program.

1 25. A commercial information management site that is
2 connected to a pay broadcast program site and a plurality
3 of viewer's terminals via a network, the commercial

4 information management site comprising:
5 a pay broadcast program list storage unit for storing
6 a pay broadcast program list on which pay broadcast program
7 identifiers are listed;
8 a commercial storage unit for storing a plurality of
9 commercials;
10 a pay broadcast program list transmission request
11 reception unit for receiving a transmission request for
12 a pay broadcast program list from each of the plurality
13 of viewer's terminals;
14 a pay broadcast program list transmission unit for,
15 when receiving a transmission request for the pay broadcast
16 program list from a viewer's terminal, reading the list
17 from the pay broadcast program list storage unit, and
18 transmitting the list to the viewer's terminal;
19 a transmission request reception unit for receiving
20 a transmission request for a pay broadcast program from
21 a viewer's terminal, the transmission request including
22 a pay broadcast program identifier included in the pay
23 broadcast program list and corresponding to the requested
24 pay broadcast program;
25 a pay broadcast program transmission requesting unit
26 for issuing a transmission request for the pay broadcast
27 program in accordance with the transmission request issued
28 by the viewer's terminal to the pay broadcast program site;
29 a reception unit for receiving the pay broadcast
30 program from the pay broadcast program site;

31 an edit unit for reading one or more commercials from
32 the commercial storage unit and edit the pay broadcast
33 program by inserting the commercials therein to produce
34 the pay broadcast program with commercials;

35 a transmission unit for transmitting the pay
36 broadcast program with commercials to the viewer's
37 terminal that has requested the pay broadcast program; and

38 a transmission counting unit for accumulating the
39 number of pay broadcast programs/commercials that have
40 been transmitted to the viewer's terminals for each pay
41 broadcast program/commercial.

1 26. The commercial information management site of Claim
2 25 further comprising:

3 a commercial list storage unit for storing a
4 commercial list on which identifiers of available
5 commercials stored in the commercial storage unit and
6 points that are given to the viewer's terminal when
7 selecting a commercial are listed,

8 wherein the pay broadcast program list transmission
9 unit reads the commercial list from the commercial list
10 storage unit as well as the pay broadcast program list,
11 and transmits both of the lists to the viewer' terminal
12 that has requested the program list,

13 the transmission request reception unit receives
14 identifiers of commercials selected from the commercial
15 list by the viewer's terminal, as well as the pay broadcast

16 program identifier, and
17 the edit unit reads commercials corresponding to the
18 identifiers of the selected commercials from the
19 commercial storage unit to edit a pay broadcast program
20 with commercials, wherein

21 the commercial information management site further
22 includes:

23 an advertisement fee calculation unit for
24 calculating an advertisement fee for a commercial based
25 on a base fee set for one point, predetermined points
26 corresponding to the commercial, the number of times the
27 commercial has been transmitted.

1 27. The commercial information management site of Claim
2 25, further comprising:

3 a commercial list storage unit for storing a
4 commercial list on which identifiers of available
5 commercials stored in the commercial storage unit are
6 listed,

7 wherein the pay broadcast program list transmission
8 unit reads the commercial list from the commercial list
9 storage unit as well as the pay broadcast program list,
10 and transmits both of the lists to the viewer' terminal
11 that has requested the program list,

12 the transmission request reception unit receives
13 identifiers of commercials selected from the commercials
14 list by the viewer's terminal, as well as the pay broadcast

15 program identifier, and
16 the edit unit reads commercials corresponding to the
17 identifiers of the selected commercials from the
18 commercial storage unit to edit a pay broadcast program
19 with commercials, wherein
20 the commercial information management site further
21 includes:
22 a commercial selection rate calculation unit for
23 calculating a selection rate of each commercial selected
24 among all of the commercials, based on the identifiers of
25 the selected commercials received by the transmission
26 request reception unit, the commercial selection rate
27 being provided for a commercial sponsor that provides the
28 commercial.

1 28. The commercial information management site of Claim
2 25, wherein
3 the pay broadcast program transmission requesting
4 unit transmits authentication information including a
5 transmission request for the pay broadcast program,
6 the authentication information includes a delivery
7 form defined by a type of each viewer's terminal,
8 the reception unit receives an authentication
9 licensing notification together with the pay broadcast
10 program from the pay broadcast program site; and
11 the transmission unit transmits the pay broadcast
12 program with commercials to the viewer's terminal that has

13 requested the pay broadcast program according to the
14 delivery form.

1 29. A viewer's terminal that is connected to a plurality
2 of commercial information management sites which each
3 receives a pay broadcast program from a pay broadcast
4 program site and transmits the pay broadcast program into
5 which commercials have been inserted to the viewer's
6 terminal, the viewer's terminal comprising:

7 a pay broadcast program list requesting unit for
8 requesting a pay broadcast program list from one of the
9 plurality of commercial information management sites;

10 a list reception unit for receiving the pay broadcast
11 program list and a commercial list from the commercial
12 information management site or receiving identifying
13 information on another commercial information management
14 site from the commercial information management site;

15 a redemanding unit for, when the list reception unit
16 receives the identifying information on the other
17 commercial information management site, redemanding the
18 pay broadcast program list from the commercial information
19 management site identified with the received identifying
20 information;

21 a display control unit for displaying, on a monitor,
22 a broadcast program selection screen on which a plurality
23 of titles of pay broadcast programs are listed according
24 to the content of the pay broadcast program list, and after

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25 a viewer selects a pay broadcast program title, displaying,
26 on the monitor, a commercial selection screen on which a
27 plurality of identifiers of commercials are listed
28 according to the content of the commercial list;
29 a transmission request transmission unit for
30 transmitting a transmission request for the pay broadcast
31 program, the transmission request including the title of
32 the selected pay broadcast program and the identifiers of
33 the selected commercials;
34 a reception unit for receiving the pay broadcast
35 program with commercials; and
36 a reproduction unit for reproducing the pay broadcast
37 program with commercials received by the reception unit.